

Carol P.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 WYNKOOP STREET
DENVER, CO 80202
Phone 800-227-8917
<http://www.epa.gov/region08>

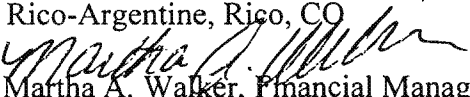
1240782 - R8 SDMS

Ref: 8TMS-FMP

JUL 25 2012

MEMORANDUM

ENFORCEMENT CONFIDENTIAL

SUBJECT: Special SPIDER Request, Site #08BU
Contract EPW05050, OU-01
Rico-Argentine, Rico, CO
FROM: 
Martha A. Walker, Financial Management Officer
Financial Management Unit
TO: Kelcey Land, Director
RCRA/CERCLA Technical Enforcement Program
REF: CRP# 157536, and CRP# 158075

Ex. 7(A)

OU-01

Certified By Financial Management Office

Itemized Cost Summary

RICO-ARGENTINE, RICO, CO SITE ID = 08 BU

Operable Unit(s): 01

SPECIAL SPIDER REQUEST CRP# 157536 and CRP# 158075

CONTRACT EPW05050 OU-01 COSTS FROM 03/23/2011 THROUGH 03/31/2012

SUPERFUND TECHNICAL ASSIST RESPONSE (ST3)

URS OPERATING SERVICES INC. (EPW05050)	\$161,233.15
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Total Site Costs:

	<u>\$161,233.15</u>
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Certified By Financial Management Office

Contract Costs

RICO-ARGENTINE, RICO, CO SITE ID = 08 BU

Operable Unit(s): 01

SPECIAL SPIDER REQUEST CRP# 157536 and CRP# 158075
 CONTRACT EPW05050 OU-01 COSTS FROM 03/23/2011 THROUGH 03/31/2012

SUPERFUND TECHNICAL ASSIST RESPONSE (ST3)

Contractor Name: URS OPERATING SERVICES INC.

EPA Contract Number: EPW05050

Delivery Order Information	<u>DO #</u>	<u>Start Date</u>	<u>End Date</u>
	10	01/29/2011	01/27/2012

Project Officer(s): SANDOVAL, JONI

Dates of Service: From: 01/29/2011 To: 01/27/2012

Summary of Service: S/F TECH ASSESSMENT&RESPONSE TEAM (REDI)

Total Costs: \$161,233.15

<u>Voucher Number</u>	<u>Voucher Date</u>	<u>Voucher Amount</u>	<u>Treasury Schedule Number and Date</u>	<u>Site Amount</u>	<u>Annual Allocation</u>
10-66	03/11/2011	123,156.85	R1634 04/11/2011	7,501.39	384.66
10-67	04/21/2011	149,644.05	R1764 05/17/2011	6,114.30	313.53
10-68	05/16/2011	144,979.91	R1861 06/14/2011	1,794.32	92.01
10-69	06/15/2011	131,621.21	R1956 07/12/2011	3,567.90	182.95
10-70	07/20/2011	169,202.75	R1A85 08/17/2011	10,013.53	513.47
10-72	09/15/2011	192,507.69	AVC110048 11/17/2011	8,226.23	421.82
10-73	10/18/2011	357,181.24	AVC110051 11/21/2011	20,311.76	1,041.55
10-74	11/15/2011	552,786.29	AVC110081 12/15/2011	41,243.98	2,114.91
10-75	12/14/2011	127,089.17	AVC120009 01/13/2012	5,647.45	289.59
10-77	02/16/2012	226,051.72	AVC120063 03/20/2012	48,947.85	2,509.95
Total:				<u>\$153,368.71</u>	<u>\$7,864.44</u>

Certified By Financial Management Office

Contract Costs

RICO-ARGENTINE, RICO, CO SITE ID = 08 BU

Operable Unit(s): 01

SPECIAL SPIDER REQUEST CRP# 157536 and CRP# 158075

CONTRACT EPW05050 OU-01 COSTS FROM 03/23/2011 THROUGH 03/31/2012

SUPERFUND TECHNICAL ASSIST RESPONSE (ST3)

Contractor Name: URS OPERATING SERVICES INC.

EPA Contract Number: EPW05050

Delivery Order Information	<u>DO #</u>	<u>Start Date</u>	<u>End Date</u>
	10	01/29/2011	01/27/2012

Project Officer(s): SANDOVAL, JONI

Dates of Service: From: 01/29/2011 To: 01/27/2012

Summary of Service: S/F TECH ASSESSMENT&RESPONSE TEAM (REDI)

Total Costs: \$161,233.15

<u>Voucher Number</u>	<u>Schedule Number</u>	<u>Rate Type</u>	<u>Annual Allocation Rate</u>
10-66	R1634	Provisional	0.051278
10-67	R1764	Provisional	0.051278
10-68	R1861	Provisional	0.051278
10-69	R1956	Provisional	0.051278
10-70	R1A85	Provisional	0.051278
10-72	AVC110048	Provisional	0.051278
10-73	AVC110051	Provisional	0.051278
10-74	AVC110081	Provisional	0.051278
10-75	AVC120009	Provisional	0.051278
10-77	AVC120063	Provisional	0.051278

EPAU.S. EPA
999 18th Street, Suite 500
Denver, CO 80202**START3**
Technical Direction Document**REMOVAL CERCLA (Task Order
#0010)**
URS Operating Services**TDD #: TO-1202-10**
Contract: EP-W-05-050! = required field ☐ Moved To EAS

TDD Name: Rico Argentine St. Louis Tunnel (RV)		I Period: Option Period 2
I Purpose: Work Assignment Initiation		
I Priority: High		I Start Date: 02/14/2012
Overtime:		I Completion Date: 11/30/2012
I Funding Category: CERCLA Removal		invoice Unit:
I Project/Site Name: Rico Argentine St. Louis Tunnel (RV)		WorkArea: Removal/Response Activities
Project Address:		Activity: CERCLA Removal Action Support
County:		Work Area Code:
City, State:		Activity Code: RV
Zip:		EMERGENCY CODE: <input type="checkbox"/> KAT <input type="checkbox"/> RIT
I SSID: 08BU		FPN:
CERCLIS:		Performance Based: No
Operable Unit:		
Authorized TDD Ceiling:		Cost/Fee
Previous Action(s):		LOE (Hours)
This Action:		Ex. 4 CBI
New Total:		

Specific Elements**Description of Work:**

Scope of Work: Provide technical support and PRP oversight support continuing on the original scope to support the Removal Evaluation and during the Removal action at the Site to include 1-4 below. Continued work includes completing reporting results of tracer studies to evaluating sources of mine water in the workings at the Blaine and Argentine mines on Silver creek. Field oversight activities are expected to begin by April/May 2012. Onsite presence is needed on an approximate 50% basis during field tasks depending on the nature of the work the PRP performs. In addition tasks include:

- 1) Review and provide comments on PRP deliverables including all progress reports, investigation, all technical deliverables under required under the Administrative Order
- 2) Provide engineering support regarding plans and operations including pond stability work, sludge handling, repository alternatives and water management procedures during the removal action. Solids management work begins in mid-July requiring oversight.
- 3) Provide engineering evaluation and review regarding water treatment options for the discharge from the St Louis Tunnel including technology review and recommendations, onsite field investigation to support technology evaluation.
- 4) Mine workings investigations including mine mapping hydrogeology analysis of influent water sources to the workings and potential hydraulic controls for influent and effluent from the audit. (Additional OSC direction to be provided before initiating this task.)

Deliverables & Schedule (Including Technical Completion Date) Provide technical review comments of the PRP plans for Subsequent PRP deliverable reviews will generally be due within 21 days of receipt from the PRP. Other technical support and

associated deliverables shall have a schedule established as task details are developed. (An email or tdd amendment will be sent with specific deliverable due dates as the need arises.)

Section

- Signed by Nghia Pham/R8/USEPA/US on 02/14/2012 03:17:07 PM, according to /R8/USEPA/US

: Steven Way

Date: 02/14/2012

Phone #: (303)312-6723

Project Officer Section - Signed by Joni Sandoval/R8/USEPA/US on 02/14/2012 03:51:16 PM, acco...

Project Officer: Joni Sandoval

Date: 02/14/2012

Contracting Officer Section - Signed by Maria Houston/R8/USEPA/US on 02/15/2012 11:00:13 AM,...

Contracting Officer: Maria Houston

Date: 02/15/2012

Contractor Section - Signed by Chuck Baker/Denyer/URSCorp on 02/16/2012 01:44:24 PM, accordi...

Contractor Contact: Chuck Baker

Date: 02/16/2012

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1202-10

EPA SITE NAME: Rico Argentine St. Louis Tunnel (RV)
ACTIVITY: CERCLA Removal Action Support

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Jan Christner 505-269-1925

REPORTING PERIOD: JANUARY 28, 2012 – FEBRUARY 24, 2012
COMPLETION DATE: NOVEMBER 30, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 – Review PRP deliverables
- Task 2 – Engineering support regarding plans and operations for removal action
- Task 3 – Engineering evaluation and review regarding water treatment
- Task 4 – Mine workings investigations

DETAILED PROGRESS ACTIVITY

- Project initiation.
- Prepare updated 2011 Source Water Investigation Report

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion Date	Actual Completion Date	Percent Completion	Schedule variances:
1	3/5/2011	3/5/2011				
2						
3						
4	2/19/2011					

- TDD budgeted dollars are at 0.89%.
- TDD budgeted hours are at 0.88%.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Complete 2011 Source Water Investigation Report.
- Review PRP report regarding hydrologic and geotechnical evaluation of the flood dikes and proposed flood dike improvements.
- Review PRP documents regarding proposed 2012 source water investigations, when submitted.
- Continued review of PRP water quality and flow data, as it becomes available on PRP website.
- Review PRP geotechnical analyses for proposed drying facility and repository sites, when submitted.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1202-10

EPA SITE NAME: Rico Argentine St. Louis Tunnel (RV)
ACTIVITY: CERCLA Removal Action Support

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Jan Christner 505-269-1925

REPORTING PERIOD: FEBRUARY 25, 2012 – MARCH 30, 2012
COMPLETION DATE: NOVEMBER 30, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 – Review PRP deliverables
- Task 2 – Engineering support regarding plans and operations for removal action
- Task 3 – Engineering evaluation and review regarding water treatment
- Task 4 – Mine workings investigations

DETAILED PROGRESS ACTIVITY

- Prepared and submitted draft and final versions of the 2011 Source Water Investigation Report.
- Reviewed PRP deliverables. Provided review of the Preliminary Water Treatment Technology Screening Report, the 2011 Investigations, Analyses, and Evaluations report, and the Interim Flood Dike Stabilization Plan.
- Prepared RCMS forms and submitted to EPA OSC for approval.
- Tracked water quality data from PRP.
- Tracked ARCO progress toward meeting Work Plan timelines.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion Date	Actual Completion Date	Percent Completion	Schedule variances:
1	3/5/2011	3/5/2011				
2						
3						
4	2/19/2011					

- TDD budgeted dollars are at 6.58%.
- TDD budgeted hours are at 6.50.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1202-10

SITE NAME: Rico Argentine St. Louis Tunnel (RV)
ACTIVITY: CERCLA Removal Action Support
EPA CONTACT: Steve Way 303-312-6723
SUPERVISOR: Jan Christner 505-269-1925

REPORTING PERIOD: MARCH 31, 2012 – APRIL 27, 2012
COMPLETION DATE: NOVEMBER 30, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 – Review PRP deliverables
- Task 2 – Engineering support regarding plans and operations for removal action
- Task 3 – Engineering evaluation and review regarding water treatment
- Task 4 – Mine workings investigations

DETAILED PROGRESS ACTIVITY

Attended planning meeting for Blaine base flow investigation.
Provided mine investigation, stream tracer study, and removal investigation data to PRP and assisted with interpretation of mine data.
Provided historic mine discharge data to Golder at EPA request.
Reviewed flood dike upgrade plans and provided input to EPA.
Assisted DRMS with downloading water level measurement transducer in 517 shaft and installation of transducers in Silver Creek.
Prepared RCMS forms and submitted to EPA OSC for approval.
Tracked water quality data from PRP.
Tracked ARCO progress toward meeting Work Plan timelines.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion Date	Actual Completion Date	Percent Completion	Schedule variances:
	3/5/2011	3/5/2011	Ongoing			
			Ongoing			
			Ongoing			
	2/19/2011	2/14/2011	Ongoing			

TDD budgeted dollars are at 8.72%.
TDD budgeted hours are at 8.55%.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1202-10

EPA SITE NAME: Rico Argentine St. Louis Tunnel (RV)
ACTIVITY: CERCLA Removal Action Support

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Jan Christner 505-269-1925

REPORTING PERIOD: APRIL 28, 2012 – MAY 25, 2012
COMPLETION DATE: NOVEMBER 30, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 – Review PRP deliverables
- Task 2 – Engineering support regarding plans and operations for removal action
- Task 3 – Engineering evaluation and review regarding water treatment
- Task 4 – Mine workings investigations

DETAILED PROGRESS ACTIVITY

- Responded to data requests and requests for technical assistance regarding Blaine Tunnel flow and 2011 source water investigations from PRP contractors, as approved by EPA.
- Prepared RCMS forms and submitted to EPA OSC for approval.
- Tracked water quality data from PRP.
- Tracked ARCO progress toward meeting Work Plan timelines.
- Prepared SAP/QAPP for Blaine Base Flow investigation.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion Date	Actual Completion Date	Percent Completion	Schedule variances:
1	3/5/2011	3/5/2011	Ongoing			
2			Ongoing			
3			Ongoing			
4	2/19/2011	2/14/2011	Ongoing			

- TDD budgeted dollars are at 19.50%.
- TDD budgeted hours are at 19.90%.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Oversight of Blaine base flow investigation work and flood dike improvements.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1202-10

EPA SITE NAME: Rico Argentine St. Louis Tunnel (RV)
ACTIVITY: CERCLA Removal Action Support

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Jan Christner 505-269-1925

REPORTING PERIOD: MAY 26, 2012 - JUNE 29, 2012
COMPLETION DATE: NOVEMBER 30, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 – Review PRP deliverables
- Task 2 – Engineering support regarding plans and operations for removal action
- Task 3 – Engineering evaluation and review regarding water treatment
- Task 4 – Mine workings investigations

DETAILED PROGRESS ACTIVITY

- Site visit to observe flood dike improvement work and plan for Blaine base flow test.
- Preparation of Health and Safety Plan for Blaine base flow test.
- Site visit to assist with in-mine work for Blaine base flow test. Subcontract labor was used to perform heavy work.
- Prepared RCMS forms and submitted to EPA OSC for approval.
- Tracked water quality data from PRP. Reviewed electronic data output formats from AECOM.
- Reviewed new Colorado water quality standards as related to how they might affect site remediation.
- Tracked BP progress toward meeting Work Plan timelines.
- Attended conference call with EPA and BP personnel and contractors regarding the status of the calcine tailings evaluation.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion Date	Actual Completion Date	Percent Completion	Schedule variances:
1	3/5/2011	3/5/2011	Ongoing			
2			Ongoing			
3			Ongoing			
4	2/19/2011	2/14/2011	Ongoing			

- TDD budgeted dollars are at 34.24%.
- TDD budgeted hours are at 33.85%.

EPAU.S. EPA
999 18th Street, Suite 500
Denver, CO 80202START3
Technical Direction DocumentREMOVAL CERCLA (Task Order
#0010)
URS Operating ServicesTDD #: TO-1005-01
Contract: EP-W-05-050

! = required field

TDD Name: Rico-Argentine St.Louis Tunnel (RS)		I Period: Option Period 1
I Purpose: Work Assignment Initiation		
I Priority: High		I Stan Date: 05/03/2010
Overtime:		I Completion Date: 06/30/2011
I Funding Category: CERCLA Removal		Invoice Unit:
I Project/Site Name: Rico-Argentine St.Louis Tunnel (RS)		WorkArea: Removal/Response Activities
Project Address:		Activity: Removal Assessment
County:		Work Area Code:
City, State:		Activity Code: RS
Zip:		EMERGENCY CODE: <input type="checkbox"/> KAT <input type="checkbox"/> RIT
I SSID: 08BU		FPN:
CERCLIS:		Performance Based: No
Operable Unit: 0j		
Authorized TDD Ceiling:		Cost/Fee
Previous Action(s):		LOE
This Action:		Ex. 4 CBI
New Total:		

Specific Elements

Description of Work:

Scope of Work:

Summarize WQ Sampling, especially most recent, but including that which provides most comprehensive understanding of flows from the adit. This will include surface and groundwater in the vicinity of the St Louis Tunnel/Adit releases to determine the associated impacts to the Dolores River. Additional support may require identifying contaminant sources, including sediment/treatment ponds, mine workings flows and solid waste sources that contribute to releases to surface water. A summary of relevant WQ data with sample dates, locations, organization, WQ results and flows is needed in a technical memo. In the event sampling is needed, a sampling plan is required before collection efforts begin.

Deliverables & Schedule (Including Technical Completion Date)

Submit a data summary report and preliminary evaluation of impacts to the Dolores River by May21, 2010. Provide a verbal assessment of the data that may be available to address the above question by May6, 2010. Sampling may be required in the short-term, i.e., within the next 10 days.

Section

- Signed by Nghia Pham/R8/USEPA/US on 05/03/2010 03:04:57 PM, according to /R8/USEPA/US

: Steve Way

Date: 05/03/2010

Phone #: (303)312-6723

Project Officer Section - Signed by Joni Sandoval/R8/USEPA/US on 05/04/2010 10:10:52 AM, acco...

Project Officer: Joni Sandoval

Date: 05/04/2010

Contracting Officer Section - Signed by Maria Houston/R8/USEPA/US on 05/07/2010 08:40:59 AM,...

Contracting Officer: Maria Houston

Date: 05/07/2010

Contractor Section - Signed by Chuck Baker/Denver/URSCorp on 05/07/2010 10:43:05 AM, accordi...

Contractor Contact: Chuck Baker

Date: 05/07/2010

EPAU.S. EPA
999 18th Street, Suite 500
Denver, CO 80202START3
Technical Direction Document
REMOVAL CERCLA (Task Order
#0010)
URS Operating ServicesTDD #: TO-1005-01
Amendment#: A
Contract: EP-W-05-050

! = required field

TDD Name: Rico-Argentine St.Louis Tunnel (RS)		! Period: Option Period 1	
! Purpose: Change Period of Performance, Incremental Funding			
! Priority: High		! Start Date: 05/03/2010	
Overtime:		! Completion Date: 09/30/2011	
! Funding Category: CERCLA Removal		Invoice Unit:	
! Project/Site Name: Rico-Argentine St.Louis Tunnel (RS)		WorkArea: Removal/Response Activities	
Project Address:		Activity: Removal Assessment	
County:		Work Area Code:	
City, State:		Activity Code: RS	
Zip:		EMERGENCY CODE: <input type="checkbox"/> KAT <input type="checkbox"/> RIT	
! SSID: 08BU		FPN:	
CERCLIS:		Performance Based: No	
Operable Unit:			
Authorized TDD Celling:		Cost/Fee	LOE
Previous Action(s):		Ex. 4 CBI	
This Action:			
New Total:			

Specific Elements

Description of Work:
Increase funding and LOE, and Change Period of Performance from 06/30/11 to 09/30/11 for following justification:

Justification:

Provide additional technical support beyond the original scope to support the Removal Evaluation to include:

- 1) a limited floodplain analysis for the area around the St Louis Tunnel Ponds, perform a preliminary Geotechnical analysis of the settling pond dike system, and perform water quality and sediment sampling as directed to characterize the nature of the releases from the Site.
- 2) In addition, provide recommended follow up analysis as needed to complete the above tasks and support recommended removal action evaluation.
- 3) Provide engineering support to develop sludge removal plans at the site including considering factors such as pond stability, sludge handling, mechanical removal alternatives and stabilization and storage and water management procedures during the removal process.
- 4) Provide recommendation regarding water treatment options for conducting temporary and intermittent water treatment of the discharge from the SL Louis Tunnel during critical flow

conditions and pond sludge removal.

Deliverables & Schedule (Including Technical Completion Date)

Perform the floodplain analysis and preliminary geotechnical analysis of the ponds and submit a technical memo report by October 1, 2010. The tasks 2 through 4 will have schedules developed following planning discussion with the OSC.

Section

: Way

Date: 09/01/2010

Phone #:

Project Officer Section - Signed by Nghia Pham/R8/USEPA/US on 09/01/2010 10:31:17 AM, accord...

Project Officer: Joni Sandoval

Date: 09/01/2010

Contracting Officer Section - Signed by Maria Houston/R8/USEPA/US on 09/03/2010 10:44:26 AM,...

Contracting Officer: Maria Houston

Date: 09/03/2010

Contractor Section - Signed by Chuck Baker/Denver/URSCorp on 09/07/2010 12:43:53 PM, accordi...

Contractor Contact: Chuck Baker

Date: 09/07/2010

EPAU.S. EPA
999 18th Street, Suite 500
Denver, CO 80202START3
Technical Direction Document
REMOVAL CERCLA (Task Order
#0010)
URS Operating ServicesTDD #: TO-1005-01
Amendment#: B
Contract: EP-W-05-050

! = required field

TDD Name: Rico-Argentine St.Louis Tunnel (RS)		I Period: Option Period 1
I Purpose: Incremental Funding		
I Priority: High		I Start Date: 05/03/2010
Overtime:		I Completion Date: 09/30/2011
I Funding Category: CERCLA Removal		Invoice Unit:
I Project/Site Name: Rico-Argentine St.Louis Tunnel (RS)		WorkArea: Removal/Response Activities
Project Address:		Activity: Removal Assessment
County:		Work Area Code:
City, State:		Activity Code: RS
Zip:		EMERGENCY CODE: <input type="checkbox"/> KAT <input type="checkbox"/> RIT
I SSID: 08BU		FPN:
CERCLIS:		Performance Based: No
Operable Unit:		
Authorized TDD Ceiling:	Cost/Fee	LOE
Previous Action(s):	Ex. 4 CBI	
This Action:		
New Total:		
Specific Elements		

Description of Work:

This mod is incremental funding and includes no new tasks or deliverables. Deliverable due dates remain the same.

Section

: Way	Date: 12/06/2010
Phone #:	
Project Officer Section - Signed by Joni Sandoval/R8/USEPA/US on 12/08/2010 03:57:12 PM, acco...	
Project Officer: Joni Sandoval	Date: 12/08/2010
Contracting Officer Section - Signed by Maria Houston/R8/USEPA/US on 12/10/2010 09:36:01 AM,...	
Contracting Officer: Maria Houston	Date: 12/10/2010
Contractor Section - Signed by Chuck Baker/Denver/URSCorp on 12/10/2010 11:58:28 AM, accordi...	
Contractor Contact: Chuck Baker	Date: 12/10/2010

EPAU.S. EPA
999 18th Street, Suite 500
Denver, CO 80202**START3**
Technical Direction DocumentREMOVAL CERCLA (Task Order
#0010)
URS Operating ServicesTDD #: TO-1005-01
Amendment#: C
Contract: EP-W-05-050

! = required field

TDD Name: Rico-Argentine St.Louis Tunnel (RS)		I Period: Option Period 1
I Purpose: Incremental Funding		
I Priority: High	I Start Date: 05/03/2010	
Overtime:	I Completion Date: 09/30/2011	
I Funding Category: CERCLA Removal	Invoice Unit:	
I Project/Site Name: Rico-Argentine St.Louis Tunnel (RS)	WorkArea: Removal/Response Activities	
Project Address:	Activity: Removal Assessment	
County:	Work Area Code:	
City, State:	Activity Code: RS	
Zip:	EMERGENCY CODE: <input type="checkbox"/> KAT <input type="checkbox"/> RIT	
I SSID: 08BU	FPN:	
CERCLIS:	Performance Based: No	
Operable Unit:		
Authorized TDD Ceiling:	Cost/Fee	LOE
Previous Action(s):	Ex. 4 CBI	
This Action:		
New Total:		

Specific Elements

Description of Work:

This mod is incremental funding to complete the report and includes no new tasks or deliverables. Deliverable due dates remain the same.

Section

: Steve Way

Date: 12/21/2010

Phone #:

Project Officer Section - Signed by Joni Sandoval/R8/USEPA/US on 12/21/2010 09:42:56 AM, acco...

Project Officer: Joni Sandoval

Date: 12/21/2010

Contracting Officer Section - Signed by Maria Houston/R8/USEPA/US on 12/23/2010 11:06:53 AM,...

Contracting Officer: Maria Houston

Date: 12/23/2010

Contractor Section - Signed by Chuck Baker/Denver/URSCorp on 12/27/2010 10:39:21 AM, accordi...

Contractor Contact: Chuck Baker

Date: 12/27/2010

EPAU.S. EPA
999 18th Street, Suite 500
Denver, CO 80202**START3**
Technical Direction Document
**REMOVAL CERCLA (Task Order
#0010)**
URS Operating ServicesTDD #: TO-1005-01
Amendment#:D
Contract: EP-W-05-050

! = required field

TDD Name: Rico-Argentine St.Louis Tunnel (RS)		I Period: Option Period 1
I Purpose: Amended SOW, Incremental Funding		
I Priority: High		I Start Date: 05/03/2010
Overtime:		I Completion Date: 09/30/2011
I Funding Category: CERCLA Removal		Invoice Unit:
I Project/Site Name: Rico-Argentine St.Louis Tunnel (RS)		Work Area: Removal/Response Activities
Project Address:		Activity: Removal Assessment
County:		Work Area Code:
City, State:		Activity Code: RS
Zip:		EMERGENCY CODE: <input type="checkbox"/> KAT <input type="checkbox"/> RIT
I SSID: 08BU		FPN:
CERCLIS:		Performance Based: No
Operable Unit:		
Authorized TDD Ceiling:	Cost/Fee	LOE
Previous Action(s):		Ex. 4 CBI
This Action:		
New Total:		

Specific Elements**Description of Work:**

Scope of Work: Provide technical support and PRP oversight support continuing on the original scope to support the Removal Evaluation and during the Removal action at the Site to include:

- 1) Review and provide comments on PRP deliverables including the Work Plan and all subsequent technical deliverables under required under the Administrative Order.
- 2) Provide engineering support to develop sludge removal plans at the site including considering factors such as pond stability, sludge handling, mechanical removal alternatives and stabilization and storage and water management procedures during the removal process.
- 3) Provide engineering evaluation and review regarding water treatment options for the discharge from the St Louis Tunnel including technology review and recommendations, onsite field investigation to support technology evaluation.

Mine workings investigations including mine mapping hydrogeology analysis of influent water sources to the workings and potential hydraulic controls for influent and effluent from the adit This shall begin by February 22, 2011 with a review of existing mapping data provided from the PRP and/or available in historical records. Pending submittal of existing mapping by the PRP, preliminary mine maps delineating major geologic and mine features shall be developed by June 30, 2011. (Additional OSC direction to be provided before initiating this task.)

Deliverables & Schedule (Including Technical Completion Date) Provide technical review comments of the PRP Work Plan by February 2011. Subsequent PRP deliverable reviews will generally be due within 14 days of receipt from the PRP. Other

technical support and associated deliverables shall have a schedule established as task details are developed.

Section

: Steven Way

Date: 02/22/2011

Phone #:

Project Officer Section - Signed by Joni Sandoval/R8/USEPA/US on 02/22/2011 08:26:26 AM, acco...

Project Officer: Joni Sandoval

Date: 02/22/2011

Contracting Officer Section - Signed by Maria Houston/R8/USEPA/US on 02/22/2011 08:37:33 AM,....

Contracting Officer: Maria Houston

Date: 02/22/2011

Contractor Section - Signed by Chuck Baker/Denver/URSCorp on 02/22/2011 11:16:17 AM, accordi...

Contractor Contact: Chuck Baker

Date: 02/22/2011

EPAU.S. EPA
999 18th Street, Suite 500
Denver, CO 80202START3
Technical Direction DocumentREMOVAL CERCLA (Task Order
#0010)
URS Operating ServicesTDD #: TO-1005-01
Amendment#:E
Contract: EP-W-05-050

! = required field

TDD Name: Rico-Argentine St.Louis Tunnel (RS)		I Period: Option Period 1
I Purpose: Change Period of Performance, Incremental Funding		
I Priority: High	I Start Date: 05/03/2010	
Overtime:	I Completion Date: 09/04/2012	
I Funding Category: CERCLA Removal	Invoice Unit:	
I Project/Site Name: Rico-Argentine St.Louis Tunnel (RS)	WorkArea: Removal/Response Activities	
Project Address:	Activity: Removal Assessment	
County:	Work Area Code:	
City, State:	Activity Code: RS	
Zip:	EMERGENCY CODE: <input type="checkbox"/> KAT <input type="checkbox"/> RIT	
I SSID: 08BU	FPN:	
CERCLIS:	Performance Based: No	
Operable Unit:		
Authorized TDD Ceiling:	Cost/Fee	LOE
Previous Action(s):	<div style="border: 2px solid black; padding: 10px; font-size: 2em; font-weight: bold;">Ex. 4 CBI</div>	
This Action:		
New Total:		

Specific Elements**Description of Work:**

Change Period of Performance from 09/30/2011 to 09/04/2012, and increase funding & LOE for justification below:

Justification:

Scope of Work: Provide technical support and PRP oversight support continuing on the original scope to support the Removal Evaluation and during the Removal action at the Site to include 1-4 below. New work includes performing tracer studies to assess surface water loss to the workings at the Blaine and Argentine mines on Silver creek. Field oversight activities are expected to begin by June 2011 on an approximate 25 to 50% basis depending on the nature of the work the PRP performs.

- 1) Review and provide comments on PRP deliverables including the Work Plan and all subsequent technical deliverables under required under the Administrative Order.
- 2) Provide engineering support to develop sludge removal plans at the site including considering factors such as pond stability, sludge handling, mechanical removal alternatives and stabilization and storage and water management procedures during the removal process.
- 3) Provide engineering evaluation and review regarding water treatment options for the discharge from the St Louis Tunnel including technology review and recommendations, onsite field investigation to support technology evaluation.

Mine workings investigations including mine mapping hydrogeology analysis of influent water sources to the workings and potential hydraulic controls for influent and effluent from the adit. This shall begin by February 15, 2011 with a review of

existing mapping data provided from the PRP and/or available in historical records. Pending submittal of existing mapping by the PRP, preliminary mine maps delineating major geologic and mine features shall be developed by June 30, 2011. (Additional OSC direction to be provided before initiating this task.)

Deliverables & Schedule (Including Technical Completion Date) Provide technical review comments of the PRP Work Plan by February 1, 2011. Subsequent PRP deliverable reviews will generally be due within 14 days of receipt from the PRP. Other technical support and associated deliverables shall have a schedule established as task details are developed.

Section

: Way	Date: 05/17/2011
Phone #:	
Project Officer Section - Signed by Joni Sandoval/R8/USEPA/US on 05/17/2011 09:00:35 AM, acco...	
Project Officer: Joni Sandoval	Date: 05/17/2011
Contracting Officer Section - Signed by Maria Houston/R8/USEPA/US on 05/17/2011 11:52:17 AM,...	
Contracting Officer: Maria Houston	Date: 05/17/2011
Contractor Section - Signed by Chuck Baker/Denver/URSCorp on 05/20/2011 10:16:37 AM, accordi...	
Contractor Contact: Chuck Baker	Date: 05/20/2011

EPAU.S. EPA
999 18th Street, Suite 500
Denver, CO 80202**START3**
Technical Direction Document
**REMOVAL CERCLA (Task Order
#0010)**
URS Operating ServicesTDD #: TO-1005-01
Amendment#: F
Contract: EP-W-05-050

! = required field

TDD Name: Rico-Argentine St.Louis Tunnel		I Period: Option Period 1
I Purpose: Incremental Funding, Change Activity Code		
I Priority: High	I Start Date: 05/03/2010	
Overtime:	I Completion Date: 09/04/2012	
I Funding Category: CERCLA Removal	Invoice Unit:	
I Project/Site Name: Rico-Argentine St.Louis Tunnel	WorkArea: Removal/Response Activities	
Project Address:	Activity: CERCLA Removal Action Support	
County:	Work Area Code:	
City, State:	Activity Code: RV	
Zip:	EMERGENCY CODE: <input type="checkbox"/> KAT <input type="checkbox"/> RIT	
I SSID: OBBU	FPN:	
CERCLIS:	Performance Based: No	
Operable Unit:		
Authorized TDD Ceiling:	Cost/Fee:	LOE
Previous Action(s):	Ex. 4 CBI	
This Action:		
New Total:		
Specific Elements		

Description of Work:Change Activity code from **RS** to **RV** effective as July 2nd, 2011, and increase funding & LOE.**Justification:**

Scope of Work: Provide technical support and PRP oversight support continuing on the original scope to support the Removal Evaluation and during the Removal action at the Site to include 1-4 below. New work includes performing tracer studies to assess surface water loss to the workings at the Blaine and Argentine mines on Silver Creek. Field oversight activities are expected to begin by June 2011 on an approximate 25 to 50% basis depending on the nature of the work the PRP performs.

- 1) Review and provide comments on PRP deliverables including the Work Plan and all subsequent technical deliverables under required under the Administrative Order
- 2) Provide engineering support to develop sludge removal plans at the site including considering factors such as pond stability, sludge handling, mechanical removal alternatives and stabilization and storage and water management procedures during the removal process.
- 3) Provide engineering evaluation and review regarding water treatment options for the discharge from the St Louis Tunnel including technology review and recommendations, onsite field investigation to support technology evaluation.

40 Mine workings investigations including mine mapping hydrogeology analysis of influent water sources to the workings and potential hydraulic controls for influent and effluent from the adit. This shall begin by February 15, 2011 with a review of existing mapping data provided from the PRP and/or available in historical records. Pending submittal of existing mapping by

the PRP, preliminary mine maps delineating major geologic and mine features shall be developed by June30, 2011. (Additional OSC direction to be provided before initiating this task.)

Deliverables & Schedule (Including Technical Completion Date) Provide technical review comments of the PRP Work Plan by February 1, 2011. Subsequent PRP deliverable reviews will generally be due within 14 days of receipt from the PRP. Other technical support and associated deliverables shall have a schedule established as task details are developed.

Section

: Way

Date: 07/11/2011

Phone #:

Project Officer Section - Signed by Joni Sandoval/R8/USEPA/US on 07/12/2011 08:58:03 AM, acco...

Project Officer: Joni Sandoval

Date: 07/12/2011

Contracting Officer Section - Signed by Maria Houston/R8/USEPA/US on 07/13/2011 10:25:23 AM,...

Contracting Officer: Maria Houston

Date: 07/13/2011

Contractor Section - Signed by Chuck Baker/Denver/URSCorp on 07/13/2011 02:12:54 PM, accordi...

Contractor Contact: Chuck Baker

Date: 07/13/2011

EPAU.S. EPA
999 18th Street, Suite 500
Denver, CO 80202**START3**
Technical Direction DocumentREMOVAL CERCLA (Task Order
#0010)
URS Operating ServicesTDD #: TO-1005-01
Amendment#:G
Contract: EP-W-05-050

! = required field

TDD Name: Rico-Argentine St.Louis Tunnel		I Period: Option Period 1
I Purpose: Incremental Funding		
I Priority: High		I Start Date: 05/03/2010
Overtime:		I Completion Date: 09/04/2012
I Funding Category: CERCLA Removal		Invoice Unit:
I Project/Site Name: Rico-Argentine St.Louis Tunnel		WorkArea: Removal/Response Activities
Project Address:		Activity: CERCLA Removal Action Support
County:		Work Area Code:
City, State:		Activity Code: RV
Zip:		EMERGENCY CODE: <input type="checkbox"/> KAT <input type="checkbox"/> RIT
I SSID: 08BU		FPN:
CERCLIS:		Performance Based: Nq
Operable Unit:		
Authorized TDD Ceiling:	Cost/Fee	LOE
Previous Action(s):		Ex. 4 CBI
This Action:		
New Total:		

Specific Elements

Description of Work:
Increase funding for;

1. Expanded source investigation of acid mine drainage using organic and salt tracer investigations
2. Continued PRP oversight onsite and technical review of deliverables
3. Reporting of findings.

Section

: Steve Way	Date: 09/26/2011
Phone #:	
Project Officer Section - Signed by Joni Sandoval/R8/USEPA/US on 09/26/2011 04:29:58 PM, acco...	
Project Officer: Joni Sandoval	Date: 09/26/2011
Contracting Officer Section - Signed by Maria Houston/R8/USEPA/US on 09/27/2011 06:56:49 AM,...	
Contracting Officer: Maria Houston	Date: 09/27/2011
Contractor Section - Signed by Chuck Baker/Denyer/URSCorp on 09/28/2011 08:29:49 AM, accordi...	
Contractor Contact: Chuck Baker	Date: 09/28/2011

EPAU.S. EPA
999 18th Street, Suite 500
Denver, CO 80202START3
Technical Direction DocumentREMOVAL CERCLA (Task Order
#0010)

URS Operating Services

TDD #: TO-1005-01
Amendment#:H
Contract: EP-W-05-050! = required field ☐ Moved To EAS

TDD Name: Rico-Argentine St.Louis Tunnel		I Period: Option Period 1	
I Purpose: Change Activity Code			
I Priority: High		I Start Date: 05/03/2010	
Overtime:		I Completion Date: 09/04/2012	
I Funding Category: CERCLA Removal		Invoice Unit:	
I Project/Site Name: Rico-Argentine St.Louis Tunnel		WorkArea: Removal/Response Activities	
Project Address:		Activity: Removal Assessment	
County:		Work Area Code:	
City, State:		Activity Code: RS	
Zip:		EMERGENCY CODE: <input type="checkbox"/> KAT <input type="checkbox"/> RIT	
I SSID: 08BU		FPN:	
CERCLIS:		Performance Based: No	
Operable Unit:			
Authorized TDD Ceiling:		Cost/Fee	LOE (Hours)
Previous Action(s):		Ex. 4 CBI	
This Action:			
New Total:			

Specific Elements

Description of Work:

This amendment is to change the activity code back to RS from RV. No new tasks or deliverables.

Section

: Steve Way	Date: 10/11/2011
Phone #:	
Project Officer Section - Signed by Joni Sandoval/R8/USEPA/US on 10/11/2011 03:39:57 PM, acco...	
Project Officer: Joni Sandoval	Date: 10/11/2011
Contracting Officer Section - Signed by Maria Houston/R8/USEPA/US on 10/12/2011 08:52:54 AM,...	
Contracting Officer: Maria Houston	Date: 10/12/2011
Contractor Section - Signed by Chuck Baker/Denver/URSCorp on 10/13/2011 10:46:29 AM, accordi...	
Contractor Contact: Chuck Baker	Date: 10/13/2011

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

EPA SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Bryan Williams 303-291-8212

REPORTING PERIOD: OCTOBER 2, 2010 – OCTOBER 29, 2010
COMPLETION DATE: SEPTEMBER 30, 2011

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Begin 2nd phase of project.

DETAILED PROGRESS ACTIVITY

- Begin second phase of contract, including preparing subcontracts for additional sampling as directed.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Data review	5/10	5/10	6/10		85%	
2 Sampling event	5/10	6/10	6/10	6/4/10	85%	
3 Trip report	7/10	7/10	8/10		50%	

- TDD budgeted dollars are at 41.25%.
- TDD budgeted hours are at 43.59%.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Continue to assist OSC.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

EPA SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Bryan Williams 303-291-8212

REPORTING PERIOD: OCTOBER 30, 2010 – NOVEMBER 26, 2010
COMPLETION DATE: SEPTEMBER 30, 2011

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Begin 2nd phase of project.

DETAILED PROGRESS ACTIVITY

- continued second phase of project.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Data review	5/10	5/10	6/10		85%	
2 Sampling event	5/10	6/10	6/10	6/4/10	85%	
3 Trip report	7/10	7/10	8/10		50%	

- TDD budgeted dollars are at 58.04%.
- TDD budgeted hours are at 64.92%.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Continue to assist OSC.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

EPA SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Bryan Williams 303-291-8212

REPORTING PERIOD: NOVEMBER 27, 2010 – DECEMBER 31, 2010
COMPLETION DATE: SEPTEMBER 30, 2011

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Begin 2nd phase of project.

DETAILED PROGRESS ACTIVITY

- Continued second phase of project.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Data review	5/10	5/10	6/10		85%	
2 Sampling event	5/10	6/10	6/10	6/4/10	85%	
3 Trip report	7/10	7/10	8/10		50%	

- TDD budgeted dollars are at 88.37%.
- TDD budgeted hours are at 85.25%.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Change project manager to Jan Christner.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

EPA SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Jan Christner 720-810-0759

REPORTING PERIOD: JANUARY 1, 2011 – JANUARY 28, 2011
COMPLETION DATE: SEPTEMBER 30, 2011

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Water quality, sediment, and soil sampling (June and November 2010) and initial site familiarization.
- Prepared sampling reports.
- Initial hydrology and geotechnical site characterization.
- Review site documents.
- Review submittals from PRP including work plans and schedules.
- Compiled and reviewed existing water quality data and prepared technical memo.
- URS offices are unable to provide technical support for this project due to conflict of interest.
- Identify sources of water treatment, geotechnical, and mining expertise.
- TDD needs to be amended to provide funding for current tasking.

DETAILED PROGRESS ACTIVITY

- Prepared and submitted Sampling and Analysis Report for November 2010 water quality, sediment, and soil sampling for EPA review and comment.
- Review of work plan and schedule submitted by PRP.
- Conference call with Steve Way and Dan Wall regarding site ecological risks.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Initial Site Characterization	5-10-10	5-10-10	6-30-10		90%	Additional sampling tasks added during Fall 2010
2 Work Plan Support	11-2010	11-2010				
3 Technical Expertise – Water Treatment, Geotechnical, Mining	12-2010	12-2010				

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

A SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

BY EPA CONTACT: Steve Way 303-312-6723
PROJECT MANAGER: Jan Christner 720-810-0759

REPORTING PERIOD: APRIL 30, 2011 – MAY 27, 2011
COMPLETION DATE: SEPTEMBER 04, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 - Removal Evaluation
- Task 2 – Document Review
- Task 3 – Solids Management
- Task 4 – Mine Investigation
- Task 5 – Water Treatment

DETAILED PROGRESS ACTIVITY

Reviewed and commented on ARCO submittals. Attended conference call regarding EPA comments to planning documents. Attended coordination/information sharing meeting with PRP and EPA.

Completed procurement for tracer study on Silver Creek. Worked with EPA, USGS, and tracer study contractor to plan work and site logistics.

Coordinated with mine investigation group. Provided oversized map scan and copies. Provided Silver Creek flow and chemistry data summary.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
Removal Evaluation	5-10-10	5-10-10	Ongoing			
Document Review	11-2010	11-2010	Ongoing			
Solids Management	12-2010	12-2010	Ongoing			
Mine Investigation	3-2011	3-2011	Ongoing			
Water Treatment	TBD	TBD	Ongoing			

TDD budgeted dollars are at 59.26%.

TDD budgeted hours are at 55.43%.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Assist with June tracer study efforts.
- Continue to review work plans and other PRP submittals.
- Prepare for oversight of summer 2011 solids management.
- Additional tasks as requested by task monitor.

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

ITE NAME: Rico-Argentine St. Louis Tunnel (RS)
VITY: Removal Assessment

EPA CONTACT: Steve Way 303-312-6723
MANAGER: Jan Christner 720-810-0759

ORTING PERIOD: MAY 28, 2011 – JULY 1, 2011
PLETION DATE: SEPTEMBER 04, 2012

IMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 - Removal Evaluation
- Task 2 – Document Review
- Task 3 – Solids Management
- Task 4 – Mine Investigation
- Task 5 – Water Treatment

TAILED PROGRESS ACTIVITY

Reviewed and commented on ARCO submittals and mine maps. Attended conference call regarding EPA comments to plaming documents. Attended meeting to discuss solids removal with PRP, EPA, and BOR.

Coordinated efforts for the initial tracer study on Silver Creek. Worked with EPA, USGS, and tracer study contractor to plan work and site logistics.

Participated in site visit to assist with tracer study and collect water samples for water quality analysis. Shipped samples to ESAT laboratory for total and dissolved metals analysis.

Coordinated with mine investigation group and provided data to EPA as requested.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Removal Evaluation	5-10-10	5-10-10	Ongoing			
2 Document Review	11-2010	11-2010	Ongoing			
3 Solids Management	12-2010	12-2010	Ongoing			
4 Mine Investigation	3-2011	3-2011	Ongoing			
5 Water Treatment	TBD	TBD	Ongoing			

- TDD budgeted dollars are at 48.99%.
- TDD budgeted hours are at 45.95%.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Follow up on June tracer study efforts.
- Continue to review work plans and other PRP submittals.
- Prepare for and begin oversight of summer 2011 solids management.
- Additional tasks as requested by task monitor.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

EPA SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Jan Christner 720-810-0759

REPORTING PERIOD: JULY 2, 2011- JULY 29, 2011
COMPLETION DATE: SEPTEMBER 04, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 - Removal Evaluation
- Task 2 - Document Review
- Task 3 - Solids Management
- Task 4 - Mine Investigation
- Task 5 - Water Treatment

DETAILED PROGRESS ACTIVITY

- Assisted in efforts to plan an organic dye tracer study. Worked with EPA, USGS, and tracer study contractor to plan work and site logistics. Prepared documentation of plans.
- Updated site status summary.
- Coordinated with mine investigation group and provided data to EPA as requested.
- Reviewed SAP, QAPP, and Initial Solids Removal Plan submittals and provided comments.
- Provided comments to EPA summary of mine investigation.
- Prepared budget for projected summer work.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Removal Evaluation	5-10-10	5-10-10	Ongoing			
2 Document Review	11-2010	11-2010	Ongoing			
3 Solids Management	12-2010	12-2010	Ongoing			
4 Mine Investigation	3-2011	3-2011	Ongoing			
5 Water Treatment	TBD	TBD	Ongoing			

- TDD budgeted dollars are at 52.54%.
- TDD budgeted hours are at 47.38%.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Follow up on June tracer study efforts and data.
- Continue to review work plans and other PRP submittals. Track data on AEComm .ftp site.
- Begin oversight of summer 2011 solids management when work commences.
- Support mine investigation.
- Additional tasks as requested by task monitor.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

A SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

BY EPA CONTACT: Steve Way 303-312-6723
PROJECT MANAGER: Jan Christner 720-810-0759

REPORTING PERIOD: JULY 30, 2011 – AUGUST 26, 2011
COMPLETION DATE: SEPTEMBER 04, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 - Removal Evaluation
- Task 2 – Document Review
- Task 3 – Solids Management
- Task 4 – Mine Investigation
- Task 5 – Water Treatment

DETAILED PROGRESS ACTIVITY

- Assisted in efforts to plan an organic dye tracer study. Worked with EPA, USGS, and tracer study contractor to plan work and site logistics. Prepared documentation of plans. Checked ISCO sampler support requirements. Searched for vendors able to perform high resolution fluorescence analysis.
- Provided analytical and equipment support for EPA/DRMS mine entry. Reviewed ARCO request for additional work for mine entry and communicated requirements to EPA.
- Processed data from June tracer study and provided to EPA and mine investigation participants.
- Reviewed ARCO .ftp site.
- Reviewed ARCO flow data and provided graphs of current data to project participants. Provided comments to EPA regarding suspect flow rate measurements from DR-3 monitor.
- Updated site status summary.
- Coordinated with mine investigation group and provided data to EPA as requested.
- Reviewed revised SAP, QAPP, and Initial Solids Removal Plan submittals and provided comments.
- Prepared updated cost summary.
- Tracked ARCO progress toward meeting Work Plan timelines.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Removal Evaluation	5-10-10	5-10-10	Ongoing			
2 Document Review	11-2010	11-2010	Ongoing			
3 Solids Management	12-2010	12-2010	Ongoing			
4 Mine Investigation	3-2011	3-2011	Ongoing			
5 Water Treatment	TBD	TBD	Ongoing			

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

EPA SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

KEY EPA CONTACT: Steve Way 303-312-6723
JOS MANAGER: Jan Christner 720-810-0759

REPORTING PERIOD: AUGUST 27, 2011 – SEPTEMBER 30, 2011
COMPLETION DATE: SEPTEMBER 04, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 - Removal Evaluation
- Task 2 – Document Review
- Task 3 – Solids Management
- Task 4 – Mine Investigation
- Task 5 – Water Treatment

DETAILED PROGRESS ACTIVITY

- Assisted in efforts to plan an organic dye tracer study. Worked with EPA, USGS, and tracer study contractor to plan work and site logistics and acquire equipment to simplify sampling the Argentine Shaft. Prepared planning document that combined plans for the stream flow tracer and in-mine tracer studies and provided preliminary results of previous work. Prepared schedule.
- Provided analytical results for June and August surface water and mine water samples.
- Reviewed updated ARCO flow data and provided graphs of current data to project participants.
- Updated site status summary.
- Reviewed Field Sampling Plan for geotechnical work and the Investigation Plan for Collapsed Adit Area at St. Louis Tunnel and provided comments.
- Prepared initial RCMS forms and submitted to EPA OSC for approval.
- Tracked ARCO progress toward meeting Work Plan timelines.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Removal Evaluation	5-10-10	5-10-10	Ongoing			
2 Document Review	11-2010	11-2010	Ongoing			
3 Solids Management	12-2010	12-2010	Ongoing			
4 Mine Investigation	3-2011	3-2011	Ongoing			
5 Water Treatment	TBD	TBD	Ongoing			

- TDD budgeted dollars are at 48.45%.
- TDD budgeted hours are at 63.58%.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

PA SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

KEY EPA CONTACT: Steve Way 303-312-6723
PROJECT MANAGER: Jan Christner 720-810-0759

REPORTING PERIOD: OCTOBER 1, 2011 – OCTOBER 28, 2011
COMPLETION DATE: SEPTEMBER 04, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 - Removal Evaluation
- Task 2 – Document Review
- Task 3 – Solids Management
- Task 4 – Mine Investigation
- Task 5 – Water Treatment

DETAILED PROGRESS ACTIVITY

- Last minute planning and performance of mine tracer study and Silver Creek tracer study. Work included mine entry, equipment procurement and setup, dye and salt tracer injection, water pumping, sampling, field testing, flow measurement, and sample management. UOS and subcontractor MSI performed this work with EPA, USGS, and DRMS. The PRP served as portal monitor for mine entries when needed.
- Observed and documented PRP solids management and site investigations during the weeks of October 4 and October 17. Provided a document to EPA summarizing site conditions the week of October 4 and began preparation of a document that summarizes site conditions the week of October 17.
- Compiled water quality data collected by UOS into an Access database. Prepared a database of flow data for consideration by EPA and the PRP.
- Prepared RCMS forms and submitted to EPA OSC for approval.
- Tracked ARCO progress toward meeting Work Plan timelines.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Removal Evaluation	5-10-10	5-10-10	Ongoing			
2 Document Review	11-2010	11-2010	Ongoing			
3 Solids Management	12-2010	12-2010	Ongoing			
4 Mine Investigation	3-2011	3-2011	Ongoing			
5 Water Treatment	TBD	TBD	Ongoing			

- TDD budgeted dollars are at 63.96%.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

EPA SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Jan Christner 720-810-0759

REPORTING PERIOD: FEBRUARY 25, 2012 – MARCH 30, 2012
COMPLETION DATE: SEPTEMBER 04, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 - Removal Evaluation
- Task 2 – Document Review
- Task 3 – Solids Management
- Task 4 – Mine Investigation
- Task 5 – Water Treatment

DETAILED PROGRESS ACTIVITY

- Prepared and submitted draft and final versions of the 2011 Source Water Investigation Report.
- Reviewed PRP deliverables. Provided review of the Preliminary Water Treatment Technology Screening Report, the 2011 Investigations, Analyses, and Evaluations report, and the Interim Flood Dike Stabilization Plan.
- Prepared RCMS forms and submitted to EPA OSC for approval.
- Tracked water quality data from PRP.
- Tracked ARCO progress toward meeting Work Plan timelines.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Removal Evaluation	5-10-10	5-10-10	Ongoing			
2 Document Review	11-2010	11-2010	Ongoing			
3 Solids Management	12-2010	12-2010	Ongoing			
4 Mine Investigation	3-2011	3-2011	Ongoing			
5 Water Treatment	TBD	TBD	Ongoing			

- TDD budgeted dollars are at 98.38%.
- TDD budgeted hours are at 92.96%.
- This project will be closed when the final MSI billing is complete and work will be completed under TDD 1202-10.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Continue to review work plans and other PRP submittals. Track flow and water quality data on AECOM .ftp site.
- Review PRP deliverables.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

EPA SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Jan Christner 720-810-0759

REPORTING PERIOD: MARCH 31, 2012 – APRIL 27, 2012
COMPLETION DATE: SEPTEMBER 04, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 - Removal Evaluation
- Task 2 – Document Review
- Task 3 – Solids Management
- Task 4 – Mine Investigation
- Task 5 – Water Treatment

DETAILED PROGRESS ACTIVITY

- Prepared RCMS forms and submitted to EPA OSC for approval.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Removal Evaluation	5-10-10	5-10-10	--	3/31/2011	100	
2 Document Review	11-2010	11-2010	Ongoing	--	--	Continuing
3 Solids Management	12-2010	12-2010	Ongoing	--	--	Continuing
4 Mine Investigation	3-2011	3-2011	Ongoing	3/31/2012	100	
5 Water Treatment	TBD	TBD	Ongoing	--	--	Continuing

- TDD budgeted dollars are at 98.41%.
- TDD budgeted hours are at 93.03%.
- This project will be closed when the final MSI billing is complete and work will be completed under TDD 1202-10.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Close out project after final billing by MSI.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

EPA SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Jan Christner 720-810-0759

REPORTING PERIOD: APRIL 28, 2012 – MAY 25, 2012
COMPLETION DATE: SEPTEMBER 04, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 - Removal Evaluation
- Task 2 – Document Review
- Task 3 – Solids Management
- Task 4 – Mine Investigation
- Task 5 – Water Treatment

DETAILED PROGRESS ACTIVITY

- Prepared RCMS forms and submitted to EPA OSC for approval.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Removal Evaluation	5-10-10	5-10-10	--	3/31/2011	100	
2 Document Review	11-2010	11-2010	Ongoing	--	--	Continuing
3 Solids Management	12-2010	12-2010	Ongoing	--	--	Continuing
4 Mine Investigation	3-2011	3-2011	Ongoing	3/31/2012	100	
5 Water Treatment	TBD	TBD	Ongoing	--	--	Continuing

- TDD budgeted dollars are at 99.76%.
- TDD budgeted hours are at 88.99%.
- This project will be closed when the final MSI billing is complete and work will be completed under TDD 1202-10.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Close out project after final billing by MSI.

EPA START, REGION 8
CONTRACT NO. EP-W-05-050

TECHNICAL DIRECTION DOCUMENT (TDD)
MONTHLY PROGRESS REPORT

TDD NO. 1005-01

EPA SITE NAME: Rico-Argentine St. Louis Tunnel (RS)
ACTIVITY: Removal Assessment

KEY EPA CONTACT: Steve Way 303-312-6723
UOS MANAGER: Jan Christner 720-810-0759

REPORTING PERIOD: MAY 26, 2012 - JUNE 29, 2012
COMPLETION DATE: SEPTEMBER 04, 2012

SUMMARY/HIGHLIGHTS OF PROGRESS-PROBLEMS

- Task 1 - Removal Evaluation
- Task 2 - Document Review
- Task 3 - Solids Management
- Task 4 - Mine Investigation
- Task 5 - Water Treatment

DETAILED PROGRESS ACTIVITY

- Prepared RCMS forms and submitted to EPA OSC for approval.

SCHEDULING/CORRECTIVE ACTION

Task #	Planned Start Date	Actual Start Date	Planned Completion date	Actual Completion date	Percent completion	Schedule variances:
1 Removal Evaluation	5-10-10	5-10-10	--	3/31/2011	100	
2 Document Review	11-2010	11-2010	Ongoing	--	--	Continuing
3 Solids Management	12-2010	12-2010	Ongoing	--	--	Continuing
4 Mine Investigation	3-2011	3-2011	Ongoing	3/31/2012	100	
5 Water Treatment	TBD	TBD	Ongoing	--	--	Continuing

- TDD budgeted dollars are at 99.82.
- TDD budgeted hours are at 89.12%.
- This project will be closed when the final MSI billing is complete and work will be completed under TDD 1202-10.

PLANNED ACTIVITIES FOR THE NEXT MONTH

- Close out project after final billing by MSI.

TARGET SHEET
EPA REGION VIII
SUPERFUND DOCUMENT MANAGEMENT SYSTEM

DOCUMENT NUMBER: 1240782

SITE NAME: RICO - ARGENTINE

DOCUMENT DATE: 07/25/2012

DOCUMENT NOT SCANNED

Due to one of the following reasons:

- ☐ PHOTOGRAPHS
- ☐ 3-DIMENSIONAL
- ☐ OVERSIZED
- ☐ AUDIO/VISUAL
- ☐ PERMANENTLY BOUND DOCUMENTS
- ☐ POOR LEGIBILITY
- ☒ OTHER
- ☐ NOT AVAILABLE
- ☐ TYPES OF DOCUMENTS NOT TO BE SCANNED
(Data Packages, Data Validation, Sampling Data, CBI, Chain of Custody)

DOCUMENT DESCRIPTION:

2 DVDs - Cost Recovery Package OU 01 Only 3/23/2011 - 3/31/2012
(Created 7/23/2012 - Contract EPW05050, Contains CBI)

Contact the Superfund Records Center to view available document.
(303) 312-6473